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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,341	06/05/2001	Patrice Hirtzlin	PF000056	7856

7590

07/29/2004

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EXAMINER

UBILES, MARIE C

ART UNIT

PAPER NUMBER

2642

DATE MAILED: 07/29/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,341

Applicant(s)

HIRTZLIN ET AL.

Examiner

Marie C. Ubiles

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: the use of the term "transmission device" when according to claim 1, the "transmission device" comprises a "receiver". The Examiner suggests the use of "transceiver device" instead of "transmission device". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Qm
Claims ~~6 and 11~~^{is} are rejected under 35 U.S.C. 102(b) as being anticipated by Scherer (US 5,790,959).

As for claim 6, Scherer discloses a radio frequency transmitter (or *transmit programmable band select/ transfer module*)(See Col. 3, lines 56-57) comprising; a first mixer (or *input mixer 35*, See Fig. 2) which converts the first signal (or *Fin*, See Fig. 2, Col. 4, lines 12-16 into a second signal by means of transposition signal (or *Ft101*)(See Col. 4, lines 16-25) coming from a frequency synthesizer (or *local input oscillator 36*); a filtering means (See Fig. 2, elements 39a-39c) which converts the second signal into a third signal by selecting part of the spectrum of the said second signal (See Col. 4, lines 30-42); a second mixer (or *output mixer*

37, See Fig. 2) which converts the third signal into a fourth signal (or *Fout*, See Fig. 2) by frequency transposition by a fixed frequency transposition (or *Ftl02*)(See Col. 4, lines 40-54); wherein the filtering means comprise at least two band-pass filters (Fig. 2, 39a-39c) of split bandwidths (See Col. 4, lines 35-37) provided with switching means (or *S1a-S1b*, Fig. 2) which make it possible to select only one of the filters.

It is inherent from Scherer's system that means for radio-wave transmission of the fourth signal (or *Fout*) are provided as the system functions of the embodiment of Fig. 2 are directed to transmission of signals.

 ~~Claim 11 is rejected for the same reasons as claim 6.~~

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherer (US 5,790,959).

Scherer discloses the system as claimed in claim 6, except for the device of Fig. 2 being directed to the receipt of signals.

On Fig. 4, Scherer teaches a receive programmable band select/transfer module, this embodiment lacks the limitation specifying, "filtering means comprise at least two band-pass filters of split bandwidths provided with switching means [...]".

However, it would have been obvious to one of ordinary skill in the art to modify the receive programmable band select/transfer module of Fig. 4, by adding the multiple filters with switching means of the transmit programmable band select/ transfer module of Fig. 2; and thus in this manner provide a radio-frequency receiver capable of selecting a bandwidth for filtering corresponding to a certain spectral segment from a choice of given bandwidths.

Claim 11 is rejected for the same reasons as claim^s 1 *and* 6.

4. Claims 2-5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherer in view of the Prior Art admitted by Applicant.

As for claims 2 and 7, Scherer discloses the system as claimed except for the two filters having pass-bands of the same width.

The Applicant admitted as prior art "If one is in the Ka band, the frequency assignment made by the various standardization organizations defines the various frequencies that can be used, which are sometimes non-contiguous. To obtain the desired bandwidth, it may be necessary to use non-contiguous bands in order to have a very broad bandwidth. As an example, it is possible to have a band consisting of two sub-bands, for example between 19.7 and 20.2 GHz and between 19.7 and 20.2 GHz separated by a forbidden band 900Mhz in width. The working bandwidth is then spread out over 1.9 GHz" (*See Description of Prior Art, Page 2, lines 15-25*).

In view of the Applicant's admitted prior art, it would have been obvious to one of ordinary skill to modify Scherer's system by providing two filters with the same bandwidth (as may be understood from having two sub-bands "between 19.7 and 20.2 GHz and between 19.7 and 20.2 GHz", each sub-band is 0.5 Ghz) and thus in this manner be in compliance with the standards of different organizations regarding the non-contiguous manner in which some frequencies are disposed in the Ka band.

In regards to claims 5 and 10, Scherer discloses filtering means comprise "three filters with switching means which make it possible to select only one of the filters" (*See Fig. 2, elements 35, 37 and 39a-39c*).

However it can be seen that Scherer lacks "...two filters having the same bandwidth, the third filter having a bandwidth twice as broad and in that the frequency synthesizer delivers a signal whose frequency varies within a first frequency range, the width of which corresponds to the bandwidth of one of the

two filters having the same bandwidth, and within a second range which corresponds to twice the first range."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select a frequency or bandwidth that will be properly receive or transmit the band of interest, so these frequencies may be properly filtered. The Examiner believes that the frequency ranges and/or bandwidth processed by the filters chosen by the Applicant lacks criticality.

The same reasons for rejection are applied to claims 3-4 and 8-9.

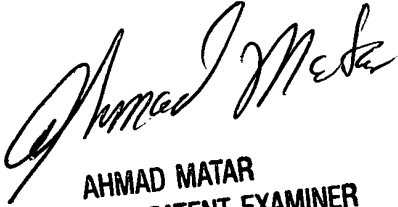
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie C. Ubiles whose telephone number is (703) 305-0684. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marie C. Ubiles
July 19, 2004.


AHMAD MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600